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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,096	12/18/2001	Alejandro Mier-Langner	ZK524-02121	5184

22884 7590 01/04/2005
MIDDLETON & REUTLINGER
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EXAMINER

WANG, QUAN ZHEN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 01/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/024,096

Applicant(s)

MIER-LANGNER ET AL.

Examiner

Quan-Zhen Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12/18/01 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>2/11/02, 4/14/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because elements in figures need to be labeled with descriptive text in addition to the numbers. Many of different elements in the figures are currently represented by similar boxes and circles. In order to clearly present the claimed invention, descriptive texts are necessary for the boxes and circles in the figures.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4, 9-15, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bansbach et al. (DE 37 19384 A1) in view of Mullaly et al. (U.S. Patent US 6,567,032 B1) and further in view of Lin et al. (U.S. Patent US 5,128,847).

Regarding claims 1, 13-14, Bansbach teaches an addressable system for light fixtures (fig. 1), comprising: a light fixture housing (fig. 1, 1 and 2), the housing having a lamp (fig. 1, 1), an infrared receiver (fig. 1, 2; fig. 9, 5); a microprocessor operably connected to memory (fig. 9, 2 and 30), the memory having instructions thereon to adjust the brightness of the lamp when the infrared receiver receives associated commands.

Bansbach differs from the claimed invention in that Bansbach does not specifically teach that the light track fixture housing having a visual light receiving sensor, and the housing can enter into a programming mode when activated by the visible light sensor.

However, Mullaly teaches a method of directing communication between addressable electrical devices (fig. 1), including a lighting device (fig. 1, 10 and 18), using a remote controller. Mullaly further teaches the control module connected to the

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electrical devices having a visible light receiving sensor (fig. 3(b), 93). Mullaly further teaches that the control modules can individually enter into a programming mode (selected for programming) when activated by the visible light sensor (column 4, lines 56-60).

Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate the receiver as taught by Mullaly into the track housing (control module) of the an addressable system for light fixtures taught by Bansbach, in order to make the remote control method easier and more intuitive.

The modified light fixture housing differs from the claimed invention in that Bansbach and Mullaly do not specifically teach a track runner. However, Lin teaches a light track fixture (fig. 4), comprising: a light fixture housing (fig. 4, 2 and 34), the housing having a lamp (fig. 4, 3), at least one track runner (fig. 4, 341 and 342). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate a light housing with a track runner, as taught by Lin, into the modified light fixture by Bansbach and Mullaly in order to make it easier to install and uninstall a light housing to a track for light fixture.

Regarding claim 2, Bansbach teaches a remote control unit having an infrared transmitter (fig. 1, 4; fig. 9, 4). Bansbach differs from the claimed invention in that Banssback does not specifically teach a visible laser transmitter in the remote control unit. However, Mullaly further teaches a remote unit having a visible laser transmitter. Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate the visible laser transmitter taught by

Mullaly into the remote control unit of Bansbach in order to make the remote control method easier and more intuitive.

Regarding claim 3, Mullaly further teaches the remote control unit comprises a microprocessor (fig. 2(c), 50) operably connected to a memory (fig. 2(c), 54) having stored thereon a plurality of light fixture commands (column 8, lines 59-67 and column 9, lines 1-2).

Regarding claim 4, Mullaly further teaches a visible light programming interface is activated when the control module is in programming mode (column 4, lines 42-46).

Regarding claims 9-10, 15, it is inherent that a user defined memory address stored in the memory; and the memory further comprises a plurality of memory storage addresses for the data representing the lamp brightness.

Regarding claim 11, Lin further teaches that the track runner (fig. 4, 341 and 342) is electrically connected to a light fixture track (fig. 4, 1).

Regarding claim 12, Lin further teaches that the light fixture housing is comprised of a light fixture caddy (fig. 3, 2) in combination with a light track fixture (fig. 3, 3), the light fixture caddy having a caddy track (fig. 3, 23 and 24), the light track fixture electrically connected to the caddy track.

Regarding claim 20, Bansbach teaches a programmable light fixture (fig. 1), comprising: an infrared receiver (fig. 1, 2; fig. 9, 5); a microprocessor operably connected to storage memory (fig. 9, 2 and 30), and control electronics (fig. 9), wherein the control electronics are operable to adjust the power supplied to the light fixture (adjust the brightness of the lamp); the memory has instructions stored thereon (fig. 9,

30) to adjust the power supplied to the light fixture (adjust the brightness of the lamp) when associated commands are received by the infrared receiver, store data representing the power supplied to the light fixture (brightness of the lamp) (column 4, lines 7-14) when the infrared receiver receives associated commands; store data representing angular positioning for the light fixture into the memory and recall the stored data when the infrared receiver receives associated commands (column 3, 58-63; column 4, lines 7-14).

Bansbach differs from the claimed invention in that Bansbach does not specifically teach that the light track fixture further comprising a visual light sensor, and the fixture can enter into a programming mode when activated by the visible light sensor.

However, Mullaly teaches a method of directing communication between addressable electrical devices (fig. 1), including a lighting device (fig. 1, 10 and 18), using a remote controller. Mullaly further teaches the control module connected to the electrical devices having a visible light receiving sensor (fig. 3(b), 93). Mullaly further teaches that the control modules can individually enter into a programming mode (selected for programming) when activated by the visible light sensor (column 4, lines 56-60).

Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate the visible light transmitter and receiver as taught by Mullaly into the remote control and the track control module of the

an addressable system for light fixtures taught by Bansbach, respectively, in order to make the remote control method easier and more intuitive.

The modified light fixture differs from the claimed invention in that Bansbach and Mullaly do not specifically teach that the light fixture further comprising a caddy track. However, Lin teaches a light track fixture (fig. 4), comprising a caddy track (fig. 3, 2). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate a caddy track, such as the one taught by Lin, into the modified light fixture by Bansbach and Mullaly in order to make it easier to install and uninstall the light housing to the track.

3. Claims 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bansbach et al. (DE 37 19384 A1) in view of Lin et al. (U.S. Patent US 5,128,847) and further in view of Mullaly et al. (U.S. Patent US 6,567,032 B1).

Regarding claim 16, Bansbach teaches an addressable light track fixture caddy (fig. 1, 1 and 2), comprising an infrared receiver (fig. 9, 5), lamp control electronics (fig. 9), and control circuitry having a microprocessor (fig. 9, 2) operably connected to storage memory (fig. 9, 2). Bansbach differs from the claimed invention in that Bansbach does not specifically teach that the light track fixture caddy further comprising a caddy track, a track runner. However, Lin teaches a light track fixture caddy (fig. 3, 2), comprising: a caddy track (fig. 3, 23 and 24), a track runner (fig. 2, 21 and 22). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate the caddy track and track runner, as they

are taught by Lin, into the light track fixture caddy taught by Bansbach in order to make it easier to install and uninstall a light housing to a track for light fixture.

The modified light track fixture caddy by Bansbach and Lin differs from the claimed invention in that Bansbach and Lin do not specifically teach that the light track fixture caddy further comprising a laser light sensor. However, Mullaly teaches a method of directing communication between addressable electrical devices (fig. 1), including a lighting device (fig. 1, 10 and 18), using a remote controller. Mullaly further teaches the control module connected to the electrical devices having a laser light sensor (fig. 3(b), 93). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate a laser light sensor, such as the one taught by Mullaly, into the modified light track fixture caddy by Bansbach and Lin in order to in order to make the remote control method easier and more intuitive.

Regarding claim 17, Bansbach further teaches that the control module is operable to adjust the light intensity of the lamp attached to it (column 4, lines 7-13). It is inherent that the control circuitry is operable to adjust the power supplied to the module.

Regarding claim 18, Bansbach further teaches that the module has memory and the memory has instructions stored.

Regarding claim 19, Bansbach teaches an addressable control module for light fixture, comprising an infrared receiver (fig. 9, 5), a microprocessor (fig. 9, 2) operably connected to storage memory (fig. 9, 2), control electronics (fig. 9), wherein the control electronics are operable to adjust the brightness of the lamp (column 4, lines 7-14)

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which inherently adjust the power supplied to the module; the memory has instructions stored thereon to adjust the brightness of the lamp (column 4, lines 7-14) which inherently adjust the power supplied to the module when associated commands are received by the infrared receiver; store data representing the power supplied to the caddy track into the memory (column 4, lines 7-14), and inherently recall the stored data when the infrared receiver receives associated commands. Bansbach differs from the claimed invention in that Bansbach does not specifically teach the control module further comprising a caddy track, and a track runner. However, Lin teaches a light track fixture caddy (fig. 3, 2), comprising: a caddy track (fig. 3, 23 and 24), a track runner (fig. 2, 21 and 22). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate the caddy track and track runner, as they are taught by Lin, into the light track fixture taught by Bansbach in order to make it easier to install and uninstall a light housing to a track for light fixture.

The modified light track fixture caddy by Bansbach and Lin differs from the claimed invention in that Bansbach and Lin do not specifically teach that the light track fixture caddy further comprising a laser light sensor. However, Mullaly teaches a method of directing communication between addressable electrical devices (fig. 1), including a lighting device (fig. 1, 10 and 18), using a remote controller. Mullaly further teaches the control module connected to the electrical devices having a laser light sensor (fig. 3(b), 93). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to incorporate a laser light sensor, such

as the one taught by Mullaly, into the modified light track fixture caddy by Bansbach and Lin in order to in order to make the remote control method easier and more intuitive.

4. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bansbach et al. (DE 37 19384 A1) in view of Mullaly et al. (U.S. Patent US 6,567,032 B1) and further in view of Lin et al. (U.S. Patent US 5,128,847) and further in view of Tanaka (U.S. Patent Application Publication US 2002/0075386 A1).

Regarding claim 5, the modified light track fixture system by Bansbach, Mullaly, and Lin differs from the claimed invention in that Bansbach, Mullaly, and Lin do not specifically teach a concentrating lens overlaying the visible light sensor. However, Tanaka teaches in a remote controlling system using visible light. Tanaka further teaches a concentrating lens (fig. 1, 6a) overlaying the visible light sensor (fig. 1, 6). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to employ a concentrating lens, such as the concentrating lens taught by Tanaka, overlaying the visible light sensor in order to increase the receiving angle and sensitivity of the receiver.

Regarding claim 6, Mullaly further teaches a photodiode for the visible light sensor (fig. 3(b), 95).

Regarding claims 7-8, the visible light receiver taught by Mullaly and the infrared receiver taught by Bansbach inherently have detection angles. It is unpatentable for a randomly choosing detection angle for a visible or an infrared receiver unless there are

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sufficient evidences to prove that the particular angle is critical or superior over other angles for the visible or infrared receiver.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-20 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-23 of copending Application No. 10/024095. Although the conflicting claims are not identical, they are not patentably distinct from each other because both applications claim at least one track control module, the track control module having a lamp, an infrared receiver, a visual light receiving sensor, a visual programming indicating interface, control electronics, a microprocessor, memory capable to store setting data; a remote control unit, having an infrared transmitter and a visual light transmitter; and wherein the track control module can be elected for programming by the visual light transmitter and the visual light receiving sensor, and can be programmed by the infrared transmitter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lansing et al. (U.S. Patent Application Publication US 2001/0040805 A1) discloses a system for individual and remote control of spaced lighting fixtures.

Mosebrook et al. (U.S. Patent US 6,687,487 B1) disclose a repeater for transmission system for controlling and determining the status of electrical devices from remote locations.

Posa (U.S. Patent US 5,731,664) discloses an electrical switch load relocation apparatus. Posa further teaches that the signal for a remote control transmitter and receiver can be straightforwardly acoustic, supersonic, RF, IR and visible light.

Grange (U.S. Patent US 5,072,216) teaches a remote controlled tracking lighting system.

Gordin et al. (U.S. Patent US 4,712,167) disclose a remote control, movable lighting system.


Kleeman (U.S. Patent US 4,598,345) discloses a remote controlled illumination equipment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quan-Zhen Wang whose telephone number is (571) 272-3114. The examiner can normally be reached on 8:30 AM - 5:00 PM, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qzw


M. R. SEDIGHIAN
PRIMARY EXAMINER